

## DETAILED ACTION

### *Specification*

1. The title of the invention is not supported by the claims. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: METHOD FOR DETERMINING SIGNAL PATH.

2. Applicant is reminded of the proper content of an abstract of the disclosure.

a. A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

i. The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

- ii. Where applicable, the abstract should include the following:
- (1) if a machine or apparatus, its organization and operation;
  - (2) if an article, its method of making;
  - (3) if a chemical compound, its identity and use;
  - (4) if a mixture, its ingredients;
  - (5) if a process, the steps.

iii. Extensive mechanical and design details of apparatus should not be given.

b. Applicant is reminded of the proper language and format for an abstract of the disclosure.

i. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology

often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

ii. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

c. The abstract of the disclosure is objected to for the following reasons:

i. Undue length: Abstract exceeds the maximum word length and lines of text allowed.

ii. Inclusion of legal phraseology: The term "means" should be avoided.

iii. Use of implied phrase: The phrase "According to one aspect of the invention" should be avoided.

d. Corrections are required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:

a. Page 8, paragraph [0035], line 4, refers to "IEEE1394 Standard p1212r." Incorporate the appropriate IEEE Standards coinciding with the date the application was drafted, such as, IEEE Std 1212-1991 or 1394-1995, as applicable.

b. Pages 10-11, paragraph [0048], lines 7-8, refer to "CH63, CH X, and CH Y in Figure 9." Only partial pieces of these elements are found in Figure 9.

c. Page 11, paragraph [0051], line 3, refers to "CH X." CH X is not identifiable in Figure 9 under the Signal Flow column.

d. Page 11, paragraph [0052], line 3, refers to "CH X." CH X is not identifiable in Figure 9 under the Signal Flow column.

- e. Page 12, paragraph [0058], line 5, refers to a modified controller in figure "3B". It appears applicant intended figure 4B.
- f. Appropriate corrections are required.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description: Path C of Figure 1; 513, 514, 515, 518 of Figure 5; 624, 625, 628 of Figure 6; 740, 742, 748 of Figure 7; 1020, 1022, 1024, 1025, 1026 of Figure 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "1028" has been used to designate both IEEE 1394 and a selector in Figure 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are

required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference signs mentioned in the description, paragraphs [0048], [0051], and [0052]: "CH63," "CH X", "CH Y" in Figure 9. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to because of the following reasons:

a. In Figure 6, element 628 is not associated with any item of the diagram. It appears element 628 should be associated with IEEE 1394.

b. In figure 9, under the Signal Flow column:

i. Address, by deleting or defining, both numeral "1s" associated with the IR and DT boxes in each step.

ii. For consistency and clarity, change the labeling of the "IR" box to IRD; "DT" to DTV; "DVH" to DVHS; "DVC" to DVCR.

iii. The use of the term "TS" in step 2, DVHS column is undefined. Please define.

c. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

9. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

10. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**11. Claims 1-14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-8 and 18-24 of U.S. Patent No. 6,976,267. Although the conflicting claims are not identical, they are not patentably distinct from each other.**

With respect to Claims 1-14, the limitations read on claims 1-8 and 18-24 of U.S. Patent No. 6,976,267. Here applicant has merely broadened the claimed limitations of

the subject matter of claims 1-8 and 18-24. Therefore, it would have been obvious to one skilled in the art at the time of the invention to broaden the claimed limitations.

**12. Claims 1, 7, and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-13 of U.S. Patent No. 6,826,776. Although the conflicting claims are not identical, they are not patentably distinct from each other.**

With respect to Claims 1, 7, and 9, they are rejected based on claims 1-13 of U.S. Patent No. 6,826,776. It would have been obvious to one skilled in the art at the time of the invention to implement the method of the apparatus claims 1-13 of U.S. Patent No. 6,826,776 without any criticality because implementation of the apparatus claims 1-13 of '776 would have implied corresponding method steps of claims 1, 7 and 9 of the present invention.

### ***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**14. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogino et al. (6,038,625).**

a. In regards to Claim 1, Ogino discloses a method of preparing capability information of each of a plurality of devices with regard to signal formats (column 6, lines 66-67 through column 7, line 1 and in column 20, lines 64-67 through column 21, lines 1-2); said capability information including receive, transmit and conversion capabilities for each of the plurality of devices with regard to signal formats (column 6, lines 66-67 through column 7, lines 1-12); designating a device that ultimately receives a signal (column 19, lines 27-29 and FIG. 7A, element 430); collecting and storing the capability information of every one of the plurality of devices by a central controller in one of said plurality of devices (FIG. 8, element 520, column 23, lines 13-16; and FIG. 2, element 12); producing a plurality of possible transmission paths between the receiving device and other devices based on the capability information collected and stored (column 8, lines 66-67 through column 9, lines 1-19 and FIG. 3, element 335); identifying a device that transmits a signal and a format of the transmitted signal by monitoring a signal format field in said signal to determine whether to process said signal (column 18, lines 37-49); and selecting one of the plurality of possible transmission paths that matches the transmitting device and the transmitted signal format for a transmission path (column 18, lines 37-49).

b. In regards to Claim 2, Ogino discloses a method wherein the possible transmission paths are specified in terms of the order of devices involved in the



transmission paths and a signal format between the devices involved (column 22, lines 59-67 through column 23, lines 1-16).

c. In regards to Claim 3, Ogino discloses a method for a producing step that comprises seeking other devices capable of transmitting a signal in the same formats as the receiving device is capable of receiving (column 19, lines 42-52).

d. In regards to Claim 4, Ogino discloses a method for a producing step that comprises seeking other devices that are capable of converting a signal into the formats that the receiving device is capable of receiving; ordering the converting devices before the receiving device; seeking other devices that are capable of transmitting a signal in the format that the converting devices are capable of converting from; and ordering the transmitting devices before the converting devices (column 19, lines 42-52, column 18, lines 43-47, and FIG. 15E, element 950b).

e. In regards to Claim 5, Ogino discloses a method wherein the capability information for each of the plurality of devices is originally possessed in each of the plurality of devices (column 3, lines 26-30).

f. In regards to Claim 6, Ogino discloses a method wherein the plurality of devices communicate with each other to collect the capability information (column 2, lines 50-56).

g. In regards to Claim 7, Ogino discloses a method for displaying the selected transmission path on a monitor (column 7, lines 37-40 and column 12, lines 41-43).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**16. Claim 8 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino et al. (6,038,625).**

In regards to Claim 8, Ogino teaches the displaying of the transmission path on a monitor, but is silent on displaying connection instructions on the monitor as claimed. Examiner takes Official Notice that it is notoriously well-known and expected to issue connection commands to establish the transmission path and to display "connection instructions" as claimed. It would have been obvious to one of ordinary skill in the art at the time of the invention to use well-known methods so as to provide a user with information needed to establish the displayed transmission path.

In regards to Claim 9, Claim 9 is a combination of Claims 1, 7, and 8. The limitations are met as noted above in response to Claims 1, 7, and 8.

In regards to Claim 10, claim is met as noted above in response to Claim 2.

In regards to Claim 11, claim is met as noted above in response to Claim 3.

In regards to Claim 12, claim is met as noted above in response to Claim 4.

In regards to Claim 13, claim is met as noted above in response to Claim 5.

In regards to Claim 14, claim is met as noted above in response to Claim 6.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Ludtke et al. (6,233,611) teaches a media manager for controlling media devices within a network and managing flow and formatting of data between the devices.

b. Ludtke et al. (6,496,860) teaches a media manager for controlling flow and format between devices in a network.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LORENZO C. ARAGON whose telephone number is (571)270-3727. The examiner can normally be reached on 8:00 AM - 10:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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